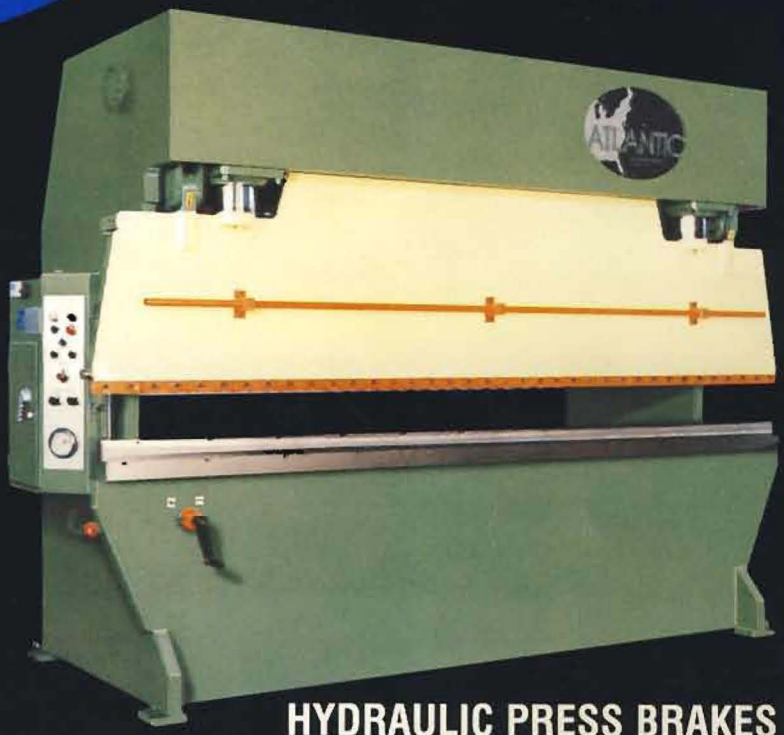
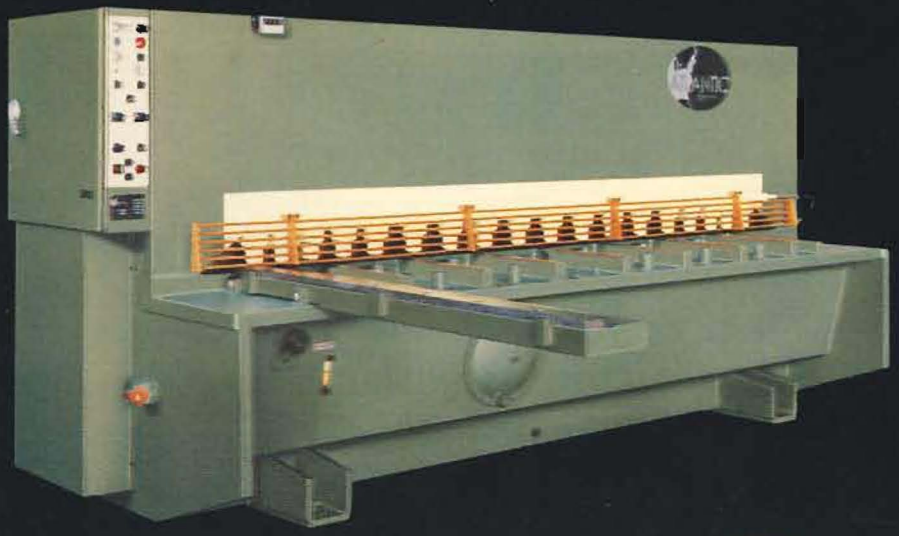
ATLANTIC

MACHINE TOOLS



HYDRAULIC PRESS BRAKES
80 ton x 6′
to
1000 ton x 20′

HYDRAULIC SHEARS
6′ x ¼″
to
20′ x 1″



The Quality Line

developed for higher production and profit in the 80's

Built in Europe for the needs of the American user.

ATLANTIC MACHINE TOOLS

The Economics of Owning Atlantic Machine Tools

With inflation a world-wide problem, Atlantic's policy of having high quality machines built devoid of what is not required to produce parts accurately and efficiently is now paying dividends to budget conscious shops around North America. The items below are meant to reinforce our philosophy.

Keeping The Price Down Without Sacrificing Quality

* All Steel Welded construction makes the machines virtually indestructible. If an overload develops the steel can give instead of permanently deforming or breaking.
* The Hydraulic systems provide instant control of the machine for safety along with pressure relief systems to prevent overloads and subsequent harm to the machine. All components with the exception of the cylinders are purchased items keeping the cost down and making replacement parts available on a local basis.
* Electric controls can be a common source of machine downtime. We chose to use Allen Bradley electrics for their world renowned quality and availability almost anywhere locally.

Atlantic press brakes (up to 250 ton) utilize a torsion bar to keep the ram parallel thereby eliminating a complicated and expensive hydraulic proportioning system. The unique hydraulic system allows the ram to "free fall" in the rapid mode reducing the need for high flow pumps and the resultant large motor and electric requirements. This results in considerable energy reduction requirements for you.

* In our shears we use replaceable hardened ways with the upper blade ram guided on roller bearings. This gives the user the ability to easily replace these when they eventually wear out, and us the economic advantage of not having to be as precise when machining the components before assembly. In our press brakes the use of non-metallic gibs provide the same benefits.
* The machines are finished in an epoxy-based rough texture paint eliminating the hours of filling and finishing needed if we were to use a glossy finish.
* The elimination of a gap in our shears and the use of pull down cylinders enable us to localize the stresses eliminating the massive side frames required in overdriven machines.
* All Atlantic machines use the hydraulic tank as an integral structure of the machine further reducing costs of additional components.
* Factory trained service personnel not only provides service if a problem arises with your machine but also do the original installation to insure that your staff understands the maintenance and operation of the equipment.

Maximum Performance Through Low Cost Design

EXPRESSED WARRANTY

All Atlantic Machine Tools are warranted to be free from defects for a period of one full year from date of installation by our serviceman. This includes all parts and labor except shear blades, dies and tooling. Warranty will be considered void if machine is not used in a normal and proper manner, not properly maintained, or modified for any special use.

No other warranty is either expressed or implied by Atlantic Machine Tools or any of its representatives.

For the sake of expediency involving a minor failure, Atlantic Machine Tools may at its option allow the user to purchase a needed part locally for which he will be reimbursed upon receipt of the defective part at Columbus, Ohio

SAFETY—All Atlantic Machine Tools are built to conform to American Standard Institute Bll 4 1973 Safety Standards. However, due to the multi purpose use of some of the equipment the purchaser shall be responsible for the proper installation and continued use of point of operation guards or awareness barriers to assure complete operator safety.

HYDRAULIC

PRESS BRAKES

80 ton x 6′
to
1000 ton x 20′

ALL-STEEL WELDED CONSTRUCTION

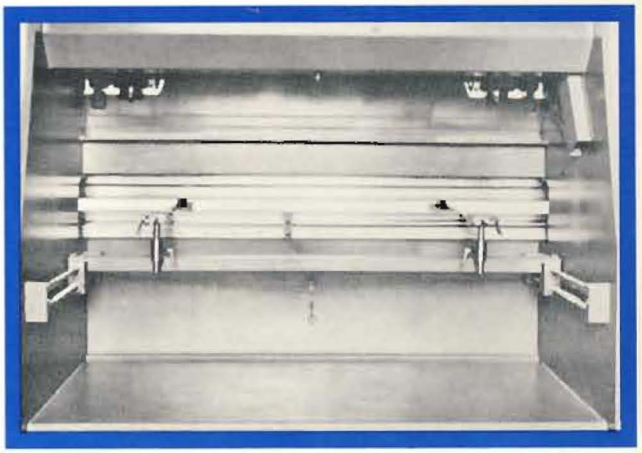
TONS PRESSURE required per lineal foot to bend mild steel

THICKNESS OF METAL			WIDTH OF FEMALE DIE OPENING																			
Ga.	Frac.	Dec.	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1 1/8"	1 1/4"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"	5"	6"	7"	8"	10"	12"
20		0.036	2.6	2.2	1.6	1.2	1.0																	
18		0.048		3.5	2.8	2.1	1.7	1.3																
16		0.060			5.3	3.7	2.8	2.2	1.7															
14		0.075				5.5	4.6	3.5	3.0	2.5	2.1													
13		0.090					6.4	5.5	4.3	3.6	3.2	2.8												
12		0.105					9.2	6.9	6.2	5.0	4.3	3.9	3.1											
11		0.120						10.1	8.0	7.0	6.1	5.3	4.3	2.9										
10		0.135							10.3	8.7	7.8	6.9	5.7	3.9										
9		0.150								11.9	9.8	8.8	7.0	5.0	3.7									
7	3/16"	0.188									16.9	13.9	11.2	8.3	6.7	4.9								
	1/4"	0.250										27.5	22.1	15.0	11.6	9.6	7.9	6.7						
	5/16"	0.313											39.2	26.5	19.3	15.0	12.5	10.4	7.7					
	3/8"	0.375												42.7	31.2	23.8	19.5	16.3	12.4	9.6				
	7/16"	0.438													45.5	35.2	28.5	24.4	17.4	15.0	11.5			
	1/2"	0.500														48.5	39.5	33.2	24.6	19.5	16.1	13.4		
	5/8"	0.625															65.5	57.9	42.8	33.1	27.3	23.3	17.0	
	3/4"	0.750																92.3	68.1	53.0	43.2	36.2	26.9	21.0
	7/8"	0.875																	103.1	79.9	63.9	52.3	39.2	31.2
	1"	1.000																		112.1	90.4	75.5	55.7	43.7

SPECIFICATIONS

MODEL	CAPACITY TONS	BENDING LENGTH	DISTANCE BETWEEN HOUSINGS	STROKE	GAP	H.P. ELECTRIC MOTOR	RAPID APPROACH SPEED	PRESS SPEED	RAPID RETURN SPEED	OVERALL HEIGHT	LENGTH	FRONT BACK	DEPTH BELOW FLOOR	WEIGHT (APPROX.)
HD80-6-5	80	72"	62"	3.9	8.5	5	140	15	165	84"	74"	50"	—	8,000
HD80-10-8		120"	98"							84"	122"		—	12,000
HD80-12-10		144"	122"							84"	146"		—	14,000
HD100-6-5	100	72"	62"	3.9	8.5	7.5	160	16	180	90"	74"	60"	—	9,500
HD100-8-6		96"	74"							90"	98"		—	11,000
HD100-10-8		120"	98"							90"	122"		—	14,000
HD100-12-10		144"	122"							100"	144"		—	17,000
HD135-6-5	135	72"	62"	4.7	9.75	10	165	16.5	190	92"	74"	62"	—	15,000
HD135-10-8		120"	98"							92"	122"		—	18,000
HD135-12-10		144"	122"							103"	146"		—	21,000
HD165-10-8	165	120"	98"	6	9.75	15	150	15	165	103"	122"	65"	—	23,000
HD165-12-10		144"	122"							111"	146"		—	26,000
HD165-14-12		168"	146"							113"	170"		—	30,000
HD200-10-8	200	120"	98"	5.9	9.75	15	150	15.5	165	103"	122"	65"	-	24,000
HD200-12-10		144"	122"							111"	146"		—	28,000
HD200-14-12		168"	146"							113"	170"		—	32,000
HD250-10-8	250	120"	98"	7.8	9.75	20	150	15	165	115"	122"	72"	—	29,000
HD250-12-10		144	122"							126"	146"		—	36,000
HD250-14-12		168"	146"							132"	170"		12	39,000
HD300-10-8	300	120"	96"	9.8	11.5	25	150	15	165	126"	122"	75"	24	32,000
HD300-12-10		144"	122"							132"	146"		24	37,000
HD300-14-12		168"	146"							138"	170"		30	42,000
HD300-16-14		192"	170"							144"	194"		30	47,000
HD450-10-8	450	120"	98"	9.8	11.5	40	110	11	120	126"	122"	90"	24	52,000
HD450-12-10		144"	122"							132"	146"		30	55,000
HD450-14-12		168"	146"							138"	170"		36	61,000
HD450-16-14		192"	170"							144"	194"		42	68,000
HD450-20-18		240"	218"							156"	242"		54	80,000

Machines larger than listed available. Please request quote.



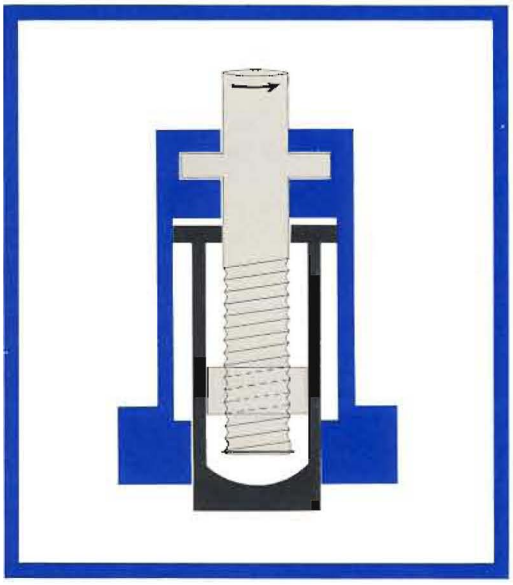
Press Brake—rear view

STANDARD EQUIPMENT

All Steel Construction
Allen Bradley Electrics
Power Stroke Adjustment
Portable Foot Control
Hydraulic Fluid
Infinite Pressure Adjustment
Inch Control
Rapid Advance Speed, Slow Pressing Speed and Rapid Return
Mechanical Stops in Cylinders.
Machines wired for 220/440V, 3 phase operation (Specify voltage needed.)

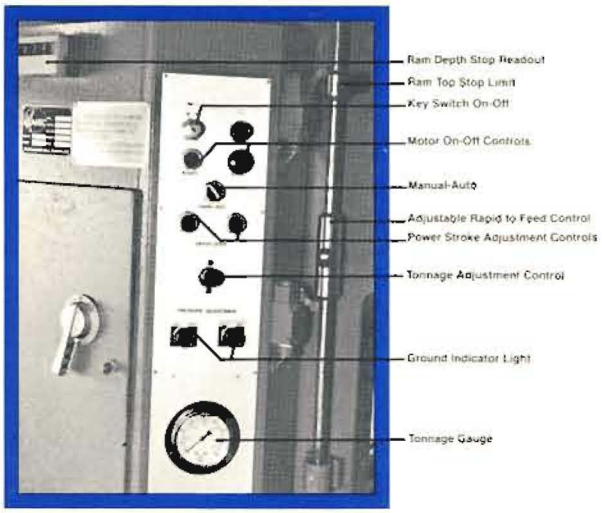
HYDRAULIC PRESS BRAKES

STANDARD EQUIPMENT



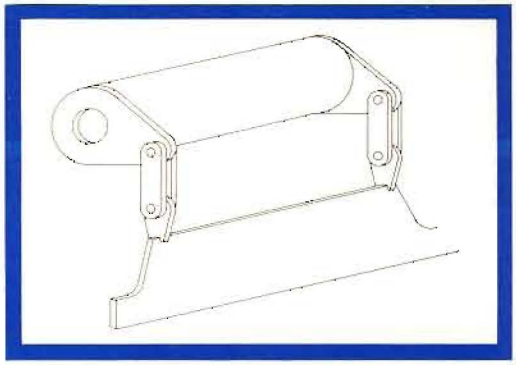
POSITIVE CYLINDER STOPS

All machines have positive adjustable stops built into the hydraulic cylinders. These stops provide accurate repetition of depth of stroke regardless of tonnage being used. Thus providing bending accuracy limited only to the variables of the material itself. Please note that while the need for accurate depth control is recognized for air bending, the same condition exists for bottoming dies, since if set too low they will over bend the same as air bend dies.



SIMPLE UNITIZED CONTROLS

All operators controls for set up and operation are located together for ease of operation. Within the control box Allen Bradley components are used exclusively for reliability.



TORSION BAR SIMPLICITY

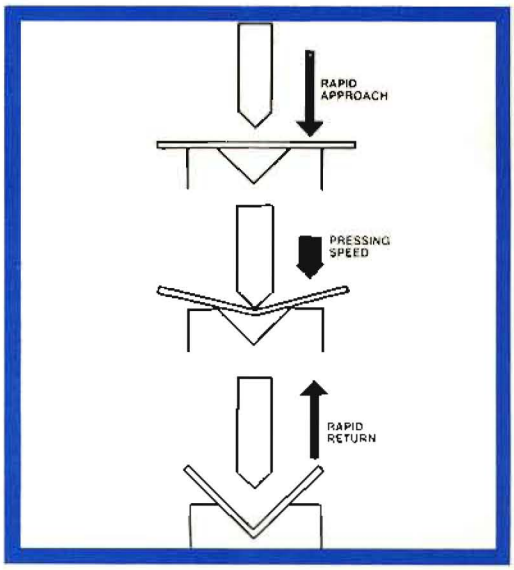
All machines thru 250 ton 12 ft. utilize a steel torsion bar to maintain ram parallelism until the cylinders stops are engaged. This design eliminates complicated and many times troublesome Hydraulic proportioning valves, steel tapes and micro switches associated with so many hydraulic press brakes.

ENERGY SAVING DESIGN

Due to the unique hydraulic circuit design Atlantic Press Brakes operate with considerably less H.P. requirements than most comparable machines, thereby saving up to 25% on electric usage.

NON METALLIC GIBS

The use of adjustable non-metallic gibs prevents galling of the bearing surfaces and permits minimum running clearances for accurate ram guidance.



MULTI SPEED OPERATION

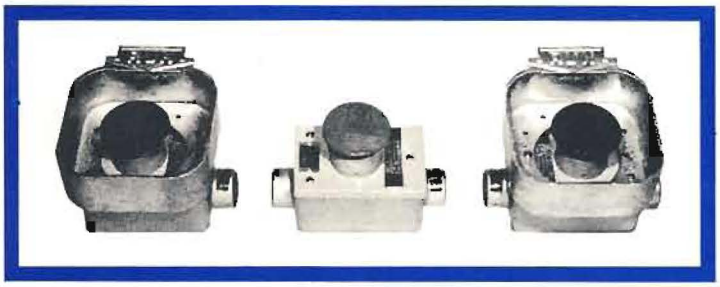
Multi Speed operation is featured on all Atlantic press brakes.

- Rapid advance to workpiece—adjustable at control box
- Slow press thru work—until ram bottoms on cylinder stops
- Rapid return—to adjustable up position

The complete adjustment of stroke length, depth and tonnage makes Atlantic brakes compatible with any bending requirements you may encounter.

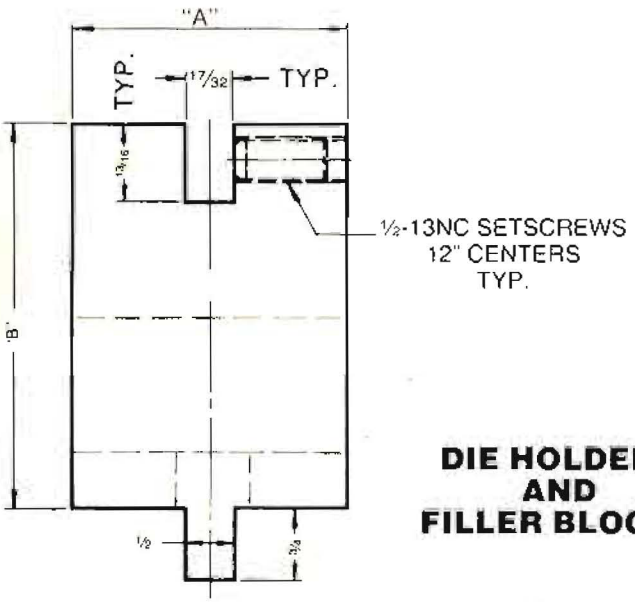
HYDRAULIC

PRESS BRAKES OPTIONS

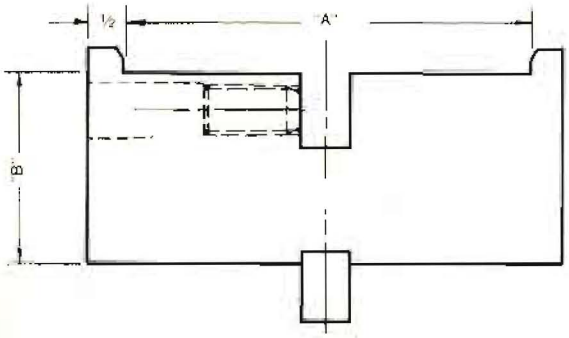


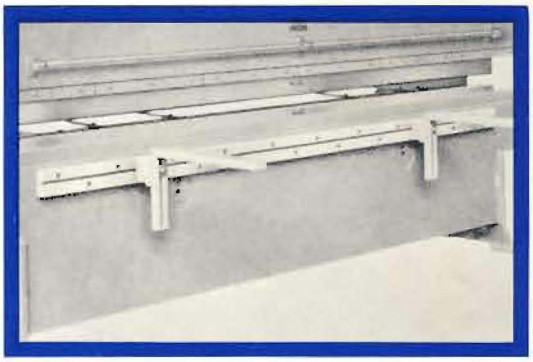
TWO HAND CONTROLS
With anti tie down are recommended when using the machine for punching purposes.

CNC BACKGUAGES
All Atlantic press brakes may be ordered with a CNC Backgauge system. A CNC Backgauge will automatically position after each press stroke dramatically increasing productivity by reducing material handling time necessary with manual gauging. It also offers the added benefits of reduced scrap and more uniform parts.



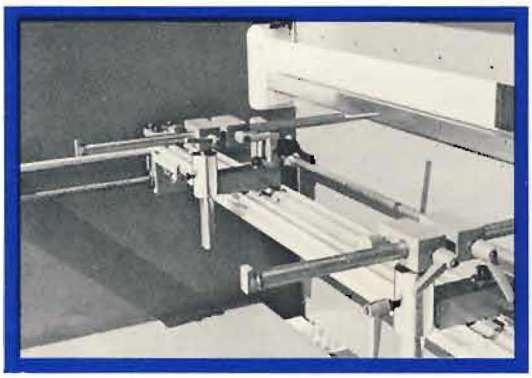
DIE HOLDERS AND FILLER BLOCKS





BOLT ON T SLOTTED SUPPORT BAR
Can be ordered with either T slotted support arms or solid support arms.

POWER OPERATED BACKGAUGE
Will speed backgauge positions if so desired.



HEAVY DUTY FRONT OPERATED BACK GAUGE
The highly adjustable back gauge is positioned with acme screws and adjustable nuts to provide a lifetime of trouble free service.

MACHINED BED FOR ANGLE BRACKETS
Is available to facilitate the use of unitized punching tooling (factory installed only).

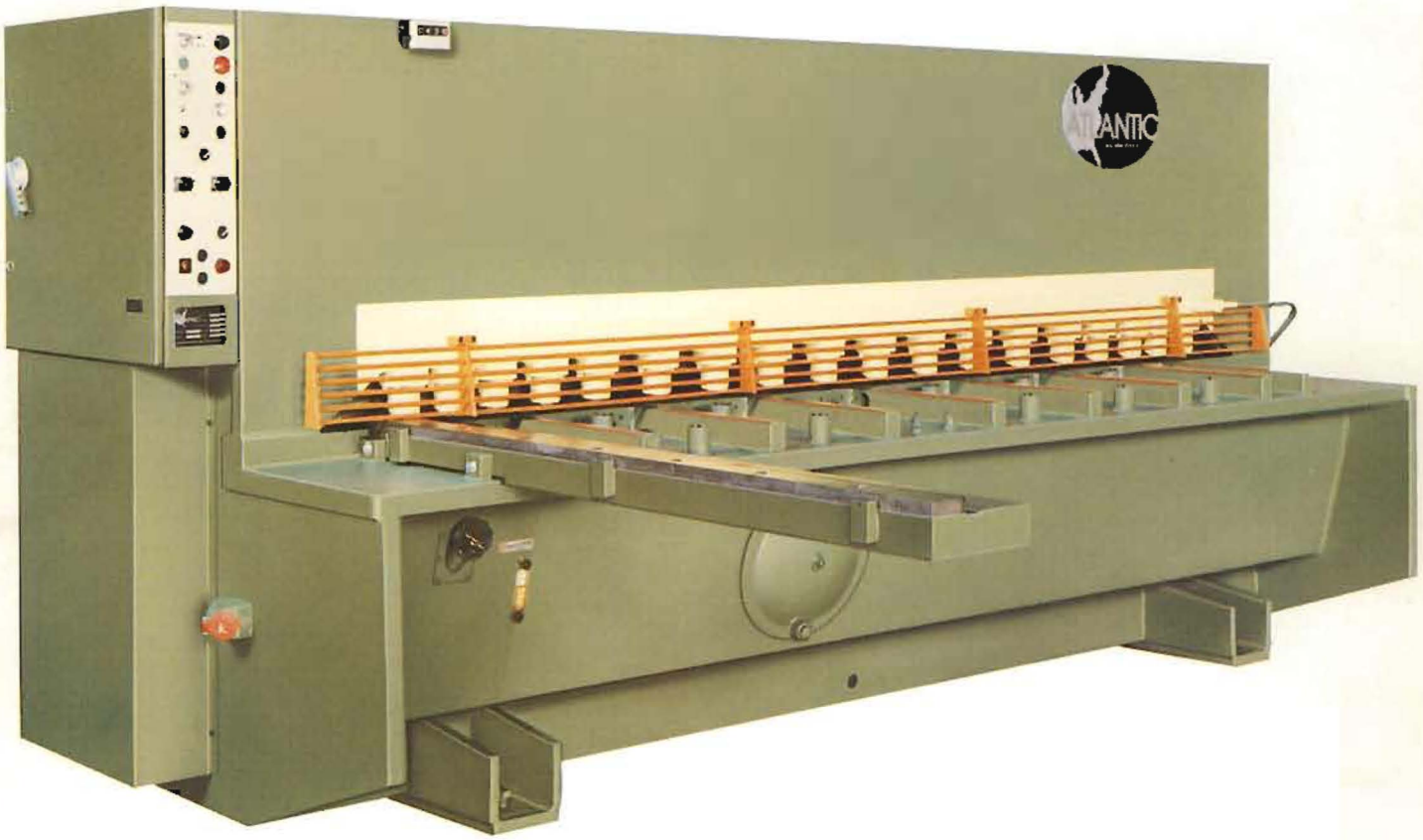
HYDRAULIC

SHEARS

ATLANTIC MACHINE TOOLS

6′ x 1/4″
to
20′ x 1″

ATLANTIC



**WITH A
6′ SQUARING ARM**

**ALL-STEEL WELDED
CONSTRUCTION**

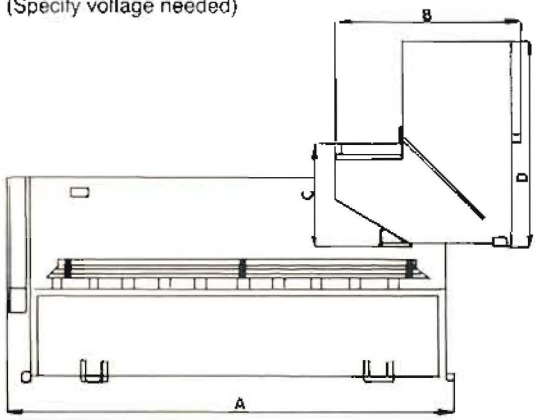
SHEARS
STANDARD EQUIPMENT

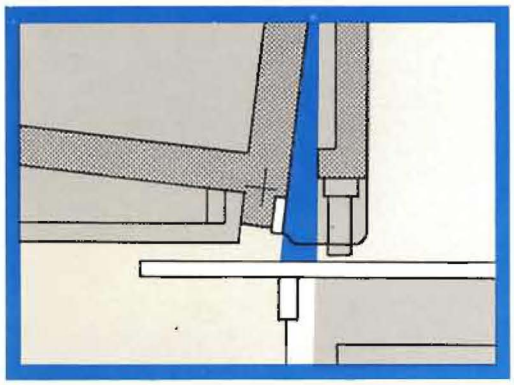
SPECIFICATIONS

MODEL	CAPACITY	SHEARING LENGTH	NUMBER OF HOLDDOWNS	POWER BACKGAUGE RANGE	MOTOR HP	WEIGHT	A	B	C	D
HD7-6	3/16	73"	11	1-39"	10	6,500	115	52	31	53
HD7-8		97"	14			7,500	135	55	31	61
HD7-10		121"	18			9,800	153	57	33	64
HD7-12		159"	21			12,000	194	67	35	72
HD25-6	1/4	73"	11	1-39"	15	11,000	115	61	31	64
HD25-8		97"	14			12,000	135	61	31	64
HD25-10		121"	18			13,500	154	63	33	68
HD25-12		159"	21			16,000	194	73	35	78
HD38-6	3/8	73"	11	1-39"	25	15,000	123	69	33	66
HD38-8		97"	14			17,500	142	69	33	66
HD38-10		121"	18			20,000	162	73	36	74
HD38-12		159"	21			24,500	202	76	38	82
HD50-6	1/2	73"	11	1-39"	30	17,500	126	90	34	75
HD50-8		97"	14			20,000	146	94	36	75
HD50-10		121"	18			28,000	166	94	37	77
HD50-12		159"	21			35,000	205	106	41	88
HD50-16		193"	28			42,000	240	126	45	96
HD50-20		241"	33			52,000	295	NA	NA	NA
HD34-8	3/4	97"	14	1-39"	60	44,000	154	96	38	96
HD34-10		121"	18			48,000	178	96	40	102
HD34-12		159"	21			56,000	216	96	38	102 (+ 16")

STANDARD EQUIPMENT

U.S. Allen Bradley Electrics
Hydraulic Retractable Back Gauge—3/8" & Larger
39" Power Front-Operated Back Gauge
Power Rake Angle Adjustment
Manual Blade Gap Adjustment
Shadow Line Lighting
Squaring Arm
Support Arm
Ball Transfers in Table
Soft Padded Hold Downs
Front Power Controlled Infinitely Variable Stroke Control
4-Edge High Chrome—High Carbon Blades
Service Manual
Machines wired for 220/440V, 3 phase operation
(Specify voltage needed)





SHADOW LIGHTING PRINCIPLE

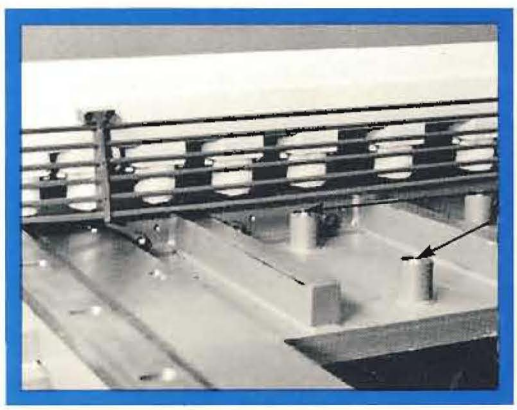
All machines are equipped with shadow line lighting for shearing to a given line.

ADJUSTABLE STROKE LENGTH

All machines feature adjustable stroke length controlled from the control panel. This allows shearing of short pieces without the ram going thru a full stroke thereby saving time and providing more strokes per minute.

HYDRAULIC HOLDDOWNS

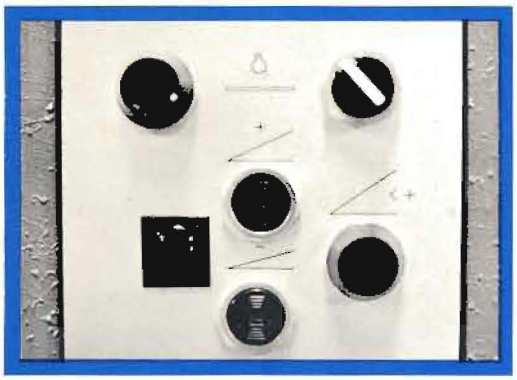
The holddowns are arranged more closely on each end of the machine to insure proper clamping of small pieces while being sheared. They also operate independently to compensate for any plate thickness variations and feature nylon padded feet to prevent marring of polished or soft materials.



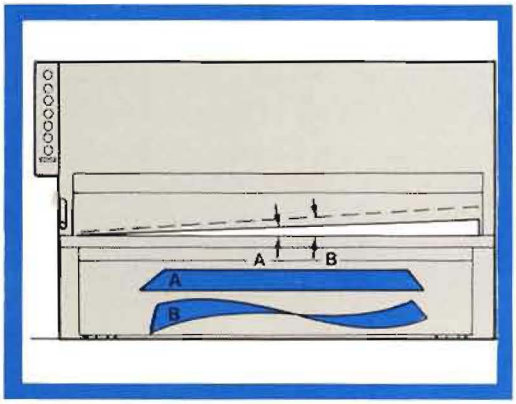
BALL TRANSFERS

Spring loaded ball transfers are provided to ease positioning of heavy plate for shearing.

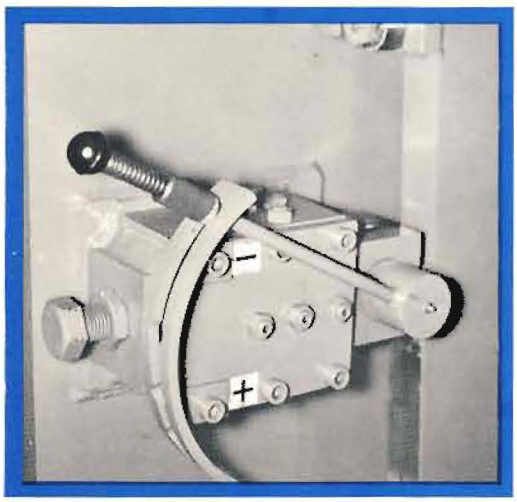
SHEARS
STANDARD EQUIPMENT



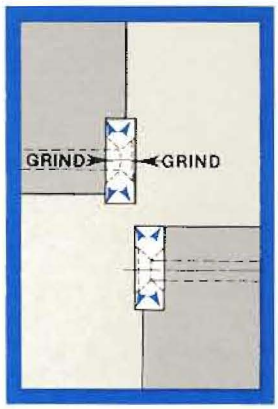
RAKE ANGLE CONTROL
The rake angle control is located near the bottom of the control box and is displayed via a digital display.



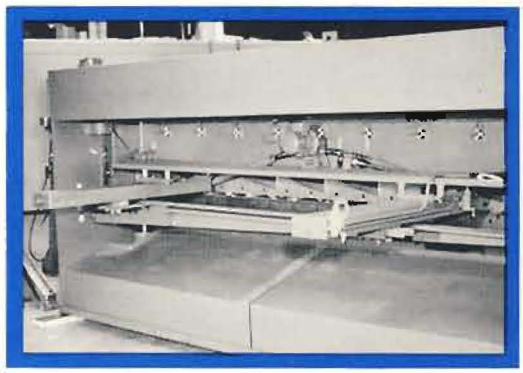
ADJUSTABLE RAKE
Power adjustment of the rake angle at the controls allows thin material to be cut at less angle, minimizing deformity of the sheared stock.



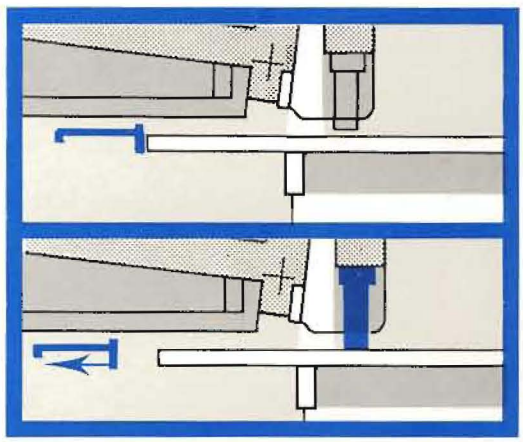
BLADE GAP ADJUSTMENT
Quick blade gap adjustment is achieved by moving the adjustment levers to the desired setting.



4-EDGED BLADES
Standard equipment includes 4 edged blades providing 4 new edges per blade before re-sharpening is required. Upon resharpening they are ground on the sides eliminating any need for shimming. Blades are provided in HC-HC or shock resistant hi Alloy depending upon model of shear.

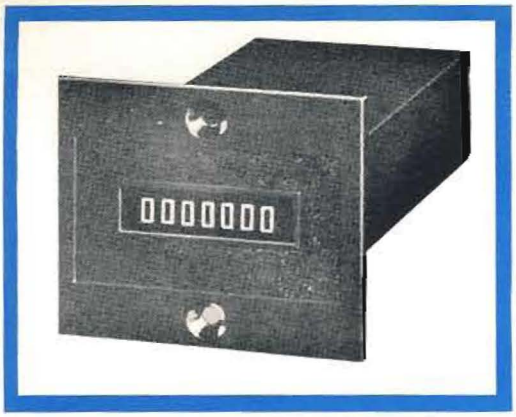


POWER BACKGAUGE
A front operated power backgauge with a range of 1" to 39" is included. Acme screws with adjustable nuts are used providing superior rigidity and accuracy. The backgauge also retracts automatically as detailed below.



AUTOMATIC RETRACTING BACKGAUGE — 3/8" AND LARGER
The backgauge automatically retracts upon clamping of the holddowns to allow the material being sheared to fall free and eliminate any binding that might occur between the lower blade and the gauge surface when shearing narrow pieces.

SHEARS OPTIONS



ELECTRONIC DIGITAL READOUT FOR BACKGAUGE

May be installed if high precision shearing off the backgauge is the norm.

STROKE COUNTER

When cutting numerous pieces this is desirable to eliminate overruns of sheared parts thereby eliminating wasted material.

DUAL FOOT SWITCH

Many times it is desirable to have this safety option when large sheets are being sheared requiring two operators. Set in this mode it requires both operators to operate their own independent foot switch before the machine will cycle.

EXTRA SHEAR BLADES

To eliminate down time while the original blades are being resharpened.

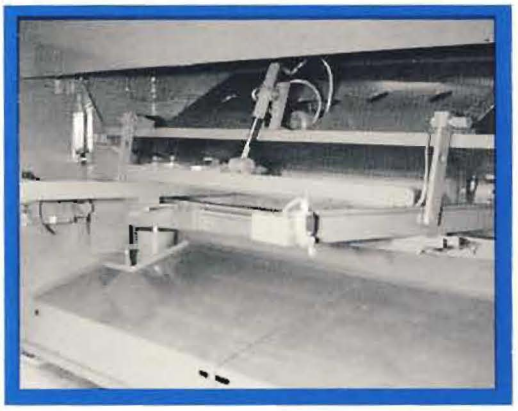
EXTRA LONG SQUARING ARMS

Are sometimes desirable, when front gauging large sheets of material.

"ONE SHOT" LUBRICATION

Enabling complete lubrication of the machine from one point with the pull of a lever.

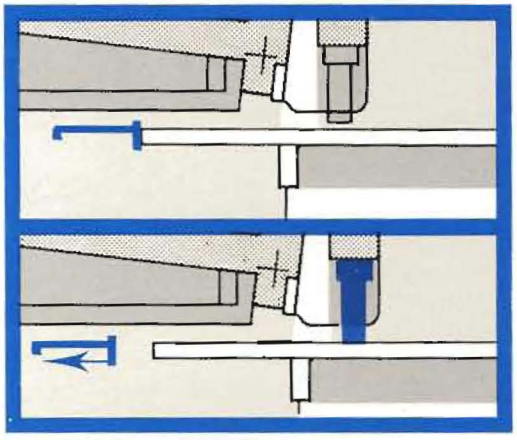
"SWING AWAY" BACKGAUGES



Either power or manual to facilitate shearing of material to longer lengths (+39") than the standard power backgauge allows for (available factory installed only).

POWER BLADE GAP ADJUSTMENT

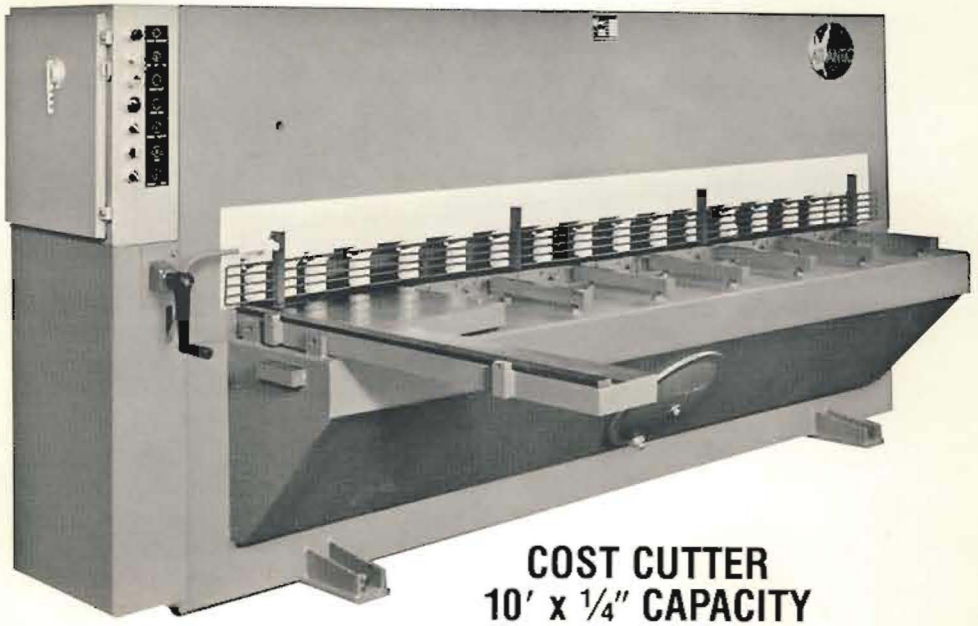
In conjunction with the power rake adjustment gives instant settings of shearing parameters for optimum cutting at all times (factory installed only).



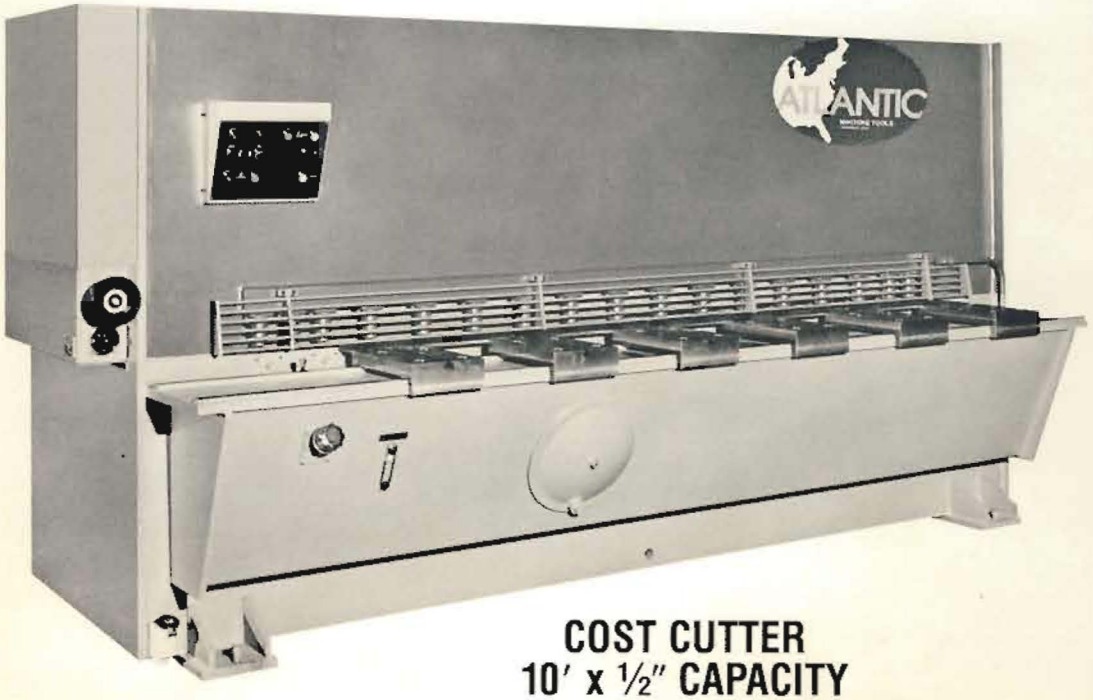
AUTOMATIC RETRACTING BACKGAUGE—¼" AND SMALLER

The backgauge automatically retracts upon clamping of the holddowns to allow the material being sheared to fall free and eliminate any binding that might occur between the lower blade and the gauge surface when shearing narrow pieces.

ATLANTIC
MACHINE TOOLS



COST CUTTER
10′ x ¼″ CAPACITY



COST CUTTER
10′ x ½″ CAPACITY
SHOWN WITH OPTIONAL TABLE

...for job shop and medium production runs